



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(54) Title: A GOLF CLUB/SHOE CLEANING DEVICE <div style="text-align: center;"> </div>		
(57) Abstract <p>A hand held cleaning device is described for cleaning golf club heads and golf shoes, comprising a handle, a shaft projecting from the handle with means, a metal point or a tuft of hard bristles at or near its end to clean the club faces or shoes. A series of bristles forming a brush extending along one edge of the shaft and a blade extending along the other edge of the shaft. The metal point or tuft of bristles may extend axially of the shaft or at right angles thereto. Two embodiments are described and shown a one piece moulding or a moulded handle with a retractable shaft brush and blade.</p>		

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A GOLF CLUB/SHOE CLEANING DEVICE

This invention relates to a cleaning device and more particularly to a device for cleaning golf club heads and golf shoes.

5 One of the problems experienced by most golfers, particularly on wet and muddy golf courses is to keep the grooves in the club face clean and free from dirt and grass. The grooves in the club head impart "spin" to the golf ball when hit to accurately control the shot.
10 Similarly, if the golfer's shoe spikes become clogged up with mud and grass, the golfer can not take up a firm stance and make an accurate stroke.

An aim of the present invention is to provide a cleaning device for cleaning golf club heads and golf
15 shoes which overcomes the above mentioned problems hitherto experienced by golfers.

According to the present invention there is provided a hand held cleaning device for golf clubs/shoes, comprising a handle, a shaft projecting from
20 the handle with means at or near its end to clean the club faces or shoes and having a series of bristles extending from one edge of the shaft. Conveniently a

blade extends from the other edge of the shaft.

In one construction the shaft and its associated blade and bristles is retractable within the handle.

In another construction the shaft blade and
5 bristles are integrally formed in one piece.

In the embodiment with the retractable shaft, the shaft is slidable within the handle by means of a finger grip attached to the shaft and projecting through a slot in the upper edge of the handle.

10 Embodiments of the invention will now be described by way of example only, with reference to the accompanying drawings in which:

Figure 1 is a perspective view of a first embodiment of the invention with the shaft extended for
15 use

Figure 2 is a longitudinal section through a modified construction of the cleaning device shown in Figure 1;

Figure 3 is a front end view of the cleaning
20 device shown in Figure 2;

Figure 4 is a side elevation of a second embodiment of a cleaning device, according to the invention;

Figure 5 is a front end view of the cleaning
25 device shown in Figure 4; and

Figure 6 is a fragmentary sectional; view of a modified construction of the cleaning device shown in Figures 4 and 5.

In the first embodiment the cleaning device
30 comprises a handle 1 which is moulded from plastics material, such as polypropylene with 20 per cent glass filling. The handle is shaped with indentations along one edge to form finger grooves 2 and side diamond cut gripping areas 3. The handle is made in two halves which
35 are joined together by screws 4. The upper edge of the handle is provided with a slot 5 and a recess 6 formed at the opposite end to an opening 7 through which a shaft 8

projects when in use.

The shaft 8 has a tapered end with a stainless steel tip 9 held by a press-fit onto the tapered end of the shaft. The lower edge of the shaft carries a strip 5 of bristles 10 held in a groove formed in the shaft 8. The other edge of the shaft has a blade 11 made of a plastics material which is inserted in a slot in the shaft.

The rear end of the shaft has an extension 12, 10 which bridges the recess 6 when the shaft is retracted in the handle and forms a releaseable catch to secure the cleaning device to the belt of the user of the device or to an article such as a golf bag or golf trolley when not in use.

15 The shaft 8 has a finger grip 13 which is located on the opposite edge to the finger grooves 2 and is slidable in the slot 5. The finger grip is attached to the shaft by a moulded connection 14 so that movement of the finger grip in the slot 5 extends or retracts the 20 shaft out from or into the handle 1. At the rear of the handle 1 is a stud removing key 15 which is securely mounted in between the handle halves by means of a pin 16 which prevents the handle halves from separating when the key is used.

25 The shaft 8 is formed with a plate 17 located in grooves formed in the handle. The shaft is held in the extended or retracted positions by two spring-loaded bearings 18 seated in two pre-drilled or punched retaining holes 19, an enlarge detail of which is shown 30 in the ringed portion. Pressure from the thumb of the user on the finger grip 13 moves the shaft back or forth to locate the bearing 18 back into their individual housings. The two halves of the handle are secured together by the four screws 4 or they may be secured by a 35 male-female snap fit.

In the modified embodiment shown in Figure 2 the stainless steel tip is replaced by a tuft of hard

bristles 20 secured in an extension of the shaft 8 and lying at right angles to the shaft axis.

A second embodiment of the cleaning device is illustrated in Figures 4 and 5 and comprises a one piece 5 moulding of plastics material such as polypropylene with 20 per cent glass filling. The handle 21 is moulded with a finger recess 22 and a thumb recess 23 at each side to suit a left or right handed user. The handle is moulded interagllly with a shaft 24 formed as a blade 25 and with 10 a series of bristles 26 to form a brush along one edge of the shaft. At the leading end of the shaft 24 is a tuft of hard bristle 27 moulded integrally with the shaft and lying at right angles to the shaft's longitudinal axis. A hole 28 is fomed in the shaft blade to facilitate 15 attachment of the cleaning device to the person using the device by for exampale, a latch type key ring (not shown).

The handle 21 of the cleaning device is hollow and can house golf implements such as a cleaning pin 29, 20 a ball marker 30 and a pitch mark repairer 31. The handle is then closed by a dome-shaped cover 32 clipping in a recess in the handle. Additional metal rings 33 may be provided to facilitate stowing of the device when not in use. A modified construction of the device of Figures 25 4 and 5 is shown in Figure 6 where a thumb grip 34 having a pin 35 is mounted to slide in a slot 36 formed in the rear of the hollow handle. A recess 37 is mounted in the handle end so that by sliding the thumb grip 34 rearwards causes the pin 35 to bridge the recess. A split ring 38 30 may be provided to secure the device to the user or an article such as a golf bag or golf trolley when not in use.

Various modifications may be made to the cleaning device for example a sheath may be provided to 35 enclose the shaft end of the one piece device shown in Figures 4 and 5. The sheath is held to the device by a series of small pimple projections around the inside of

the sheath opening which locate on the device handle to hold the two parts firmly in place. In a preferred embodiment the sheath may be moulded with a loop so that it may be suspended from the belt of a user. The
5 cleaning device can thus be readily removed from its sheath and replaced after use.

In use the pointed end or stiff tuft of bristles is used to clean the grooves in the golf face to remove any dirt or grass after which the brush is used to brush
10 the loose particles away. If the club face becomes clogged with mud as may be the case when taking a "divot", then the shaft blade can be used to scrape the face clean.

CLAIMS:

1. A hand held cleaning device for golf clubs/shoes, comprising a handle, a shaft projecting from the handle with means at or near its end to clean the club faces or shoes and having a series of bristles extending from one edge of the shaft.
2. A hand held cleaning device as claimed in Claim 1, wherein a blade extends from the other edge of the shaft.
3. A hand held cleaning device as claimed in Claim 1 or 2, wherein the shaft and its associated blade and bristles is retractable within the handle.
4. A hand held cleaning device as claimed in Claim 1 or 2, wherein the shaft blade and bristles are integrally formed in one piece.
5. A hand held cleaning device as claimed in any preceding Claim, wherein the means for cleaning the club faces or shoes is made of a hardened metal point.
6. A hand held cleaning device as claimed in Claim 5, wherein the hardened metal point extends axially of the shaft.
7. A hand held cleaning device as claimed in Claim 5, wherein the hardened metal point extends at right angles to the shaft.
8. A hand held cleaning device as claimed in any of claims 1 to 4, wherein the means for cleaning the club faces or shoes is a tuft of hard bristles.
9. A hand held cleaning device as claimed in Claim 8, wherein the tuft of hard bristle extends at right angles to the shaft.
10. A hand held cleaning device as claimed in Claim 4, wherein the handle is hollow to receive golf implements and is closed by a cover.
11. A hand held cleaning device as claimed in any preceding Claim, wherein the handle incorporates a stud-key securely mounted in the free end of the handle.
12. A hand held cleaning device as claimed in Claim

3, wherein the handle has a slot on its upper edge through which a finger grip attached to the shaft projects, such that by sliding the finger grip along the slot the shaft is slid into or out of the handle.

13. A hand held cleaning device as claimed in any preceding Claim, wherein the handle is formed with undulations along one edge to form finger gripping means.

14. A hand held cleaning device as claimed in any preceding Claim, wherein the free end of the handle has a recess which is bridged by a pin projecting for the rear of the shaft to form a releaseable catch to secure the cleaning device to the user of the device or to an article.

15. A hand held cleaning device as claimed in any preceding Claim, wherein the cleaning device is provided with at least one hole to facilitate attachment of the device to the user of the device or to an article.

16. A hand held cleaning device for golf clubs/shoes substantially as hereinbefore described with reference to and as shown in Figures 1, 2 and 3, Figures 4 and 5 or Figure 6 of the accompanying drawings.

1-2

FIG.1.

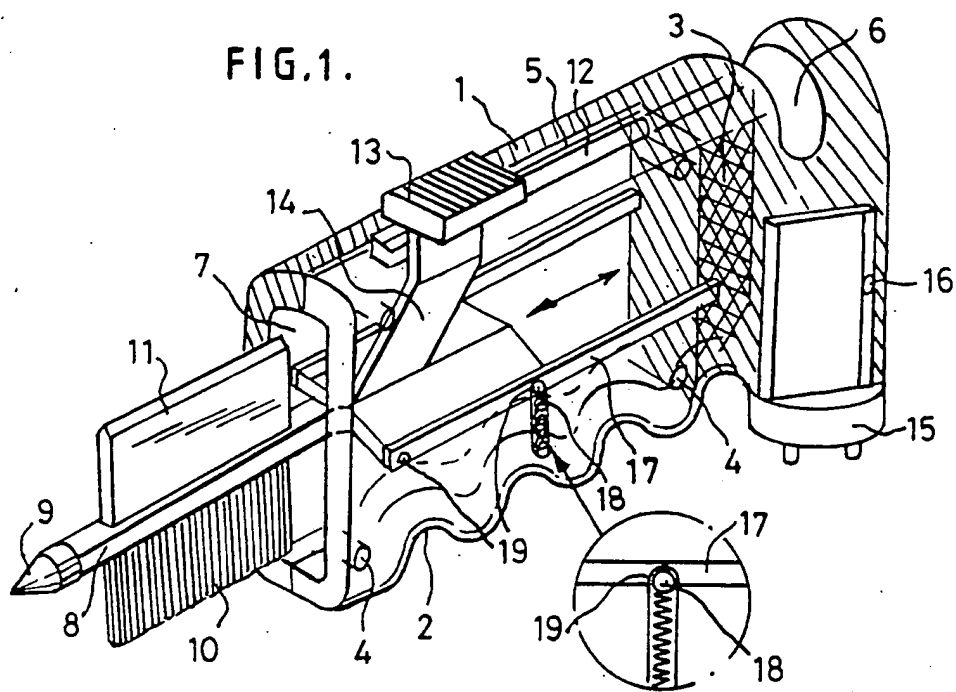


FIG.3.

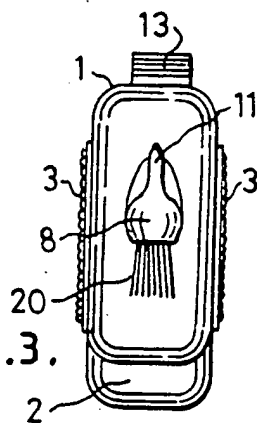
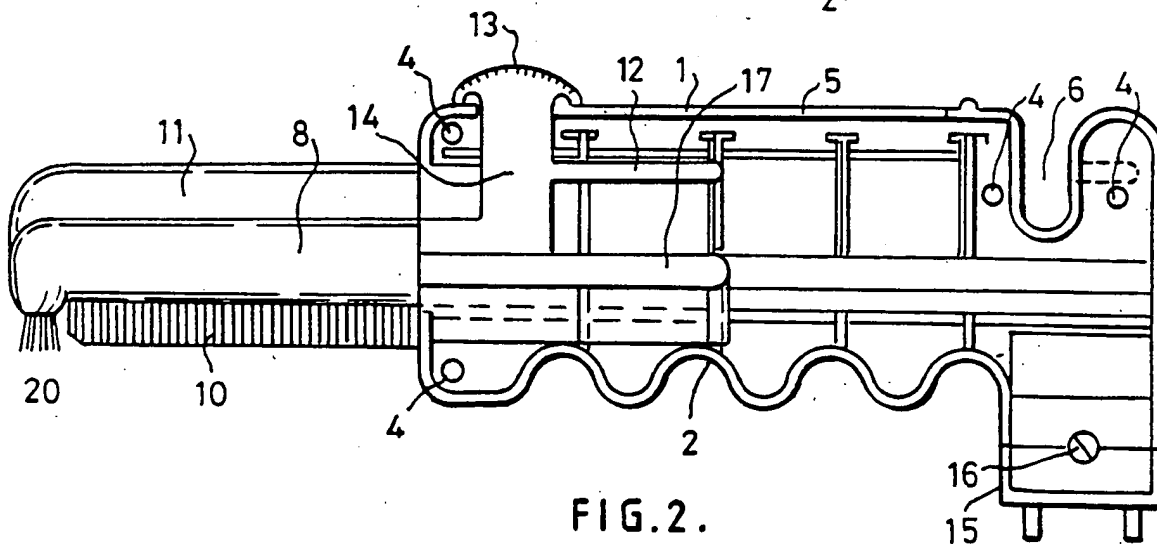
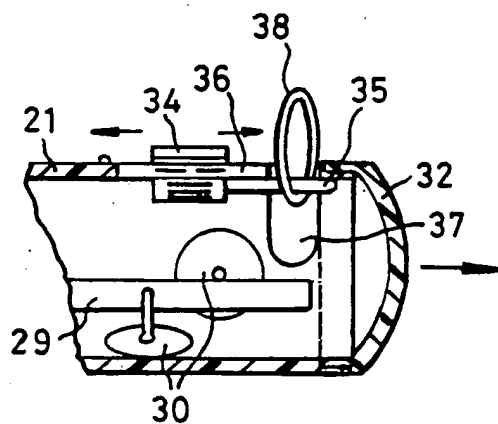
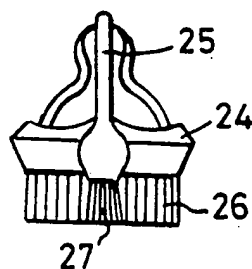
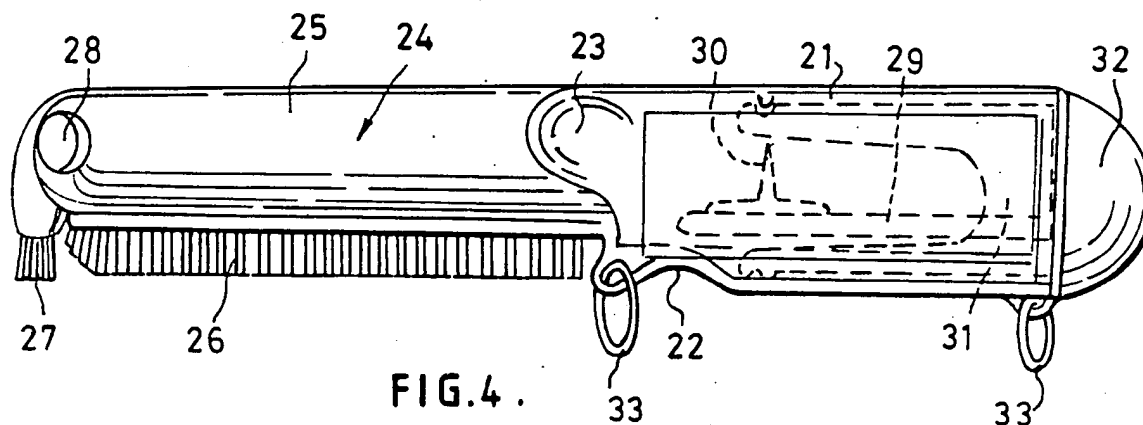


FIG.2.



2-2



SUBSTITUTE SHEET

INTERNATIONAL SEARCH REPORT

International Application No PCT/GB 90/01154

I. CLASSIFICATION OF SUBJECT MATTER (if several classification symbols apply, indicate all) ⁶ According to International Patent Classification (IPC) or to both National Classification and IPC IPC5: A 63 B 57/00																	
II. FIELDS SEARCHED <div style="text-align: center; border-top: 1px solid black; border-bottom: 1px solid black;">Minimum Documentation Searched⁷</div> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 25%; border-bottom: 1px solid black;">Classification System</th> <th style="border-bottom: 1px solid black;">Classification Symbols</th> </tr> <tr> <td style="padding: 5px; vertical-align: top;">IPC5</td> <td style="padding: 5px; vertical-align: top;">A 63 B; A 46 B</td> </tr> </table> <div style="text-align: center; border-top: 1px solid black; border-bottom: 1px solid black;">Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in Fields Searched⁸</div>			Classification System	Classification Symbols	IPC5	A 63 B; A 46 B											
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IPC5	A 63 B; A 46 B																
III. DOCUMENTS CONSIDERED TO BE RELEVANT⁹ <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%; padding: 5px;">Category[*]</th> <th style="width: 60%; padding: 5px;">Citation of Document,¹¹ with indication, where appropriate, of the relevant passages¹²</th> <th style="width: 30%; padding: 5px;">Relevant to Claim No.¹³</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; vertical-align: top;">X</td> <td style="padding: 5px;">US, A, 3047896 (A.M. GUNDERSON) 7 August 1962, see the whole document <div style="text-align: center;">--</div></td> <td style="text-align: center; vertical-align: top;">1,2,4,8, 9,15</td> </tr> <tr> <td style="text-align: center; vertical-align: top;">X</td> <td style="padding: 5px;">US, A, 3105257 (J.H. BLAGDEN) 1 October 1963, see the whole document <div style="text-align: center;">--</div></td> <td style="text-align: center; vertical-align: top;">1,2,8,9</td> </tr> <tr> <td style="text-align: center; vertical-align: top;">X</td> <td style="padding: 5px;">US, A, 2857608 (R.H. SCHWARTZ) 28 October 1958, see the whole document <div style="text-align: center;">--</div></td> <td style="text-align: center; vertical-align: top;">1,8,9, 15</td> </tr> <tr> <td style="text-align: center; vertical-align: top;">A</td> <td style="padding: 5px;">US, A, 2536942 (T.M. KANTER) 2 January 1951, see the whole document <div style="text-align: center;">--</div></td> <td style="text-align: center; vertical-align: top;">1-16</td> </tr> </tbody> </table>			Category [*]	Citation of Document, ¹¹ with indication, where appropriate, of the relevant passages ¹²	Relevant to Claim No. ¹³	X	US, A, 3047896 (A.M. GUNDERSON) 7 August 1962, see the whole document <div style="text-align: center;">--</div>	1,2,4,8, 9,15	X	US, A, 3105257 (J.H. BLAGDEN) 1 October 1963, see the whole document <div style="text-align: center;">--</div>	1,2,8,9	X	US, A, 2857608 (R.H. SCHWARTZ) 28 October 1958, see the whole document <div style="text-align: center;">--</div>	1,8,9, 15	A	US, A, 2536942 (T.M. KANTER) 2 January 1951, see the whole document <div style="text-align: center;">--</div>	1-16
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<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <p>* Special categories of cited documents:¹⁰</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </div> <div style="width: 48%;"> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step</p> <p>"Y" document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"&" document member of the same patent family</p> </div> </div>																	
IV. CERTIFICATION <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px; vertical-align: top;"> Date of the Actual Completion of the International Search 29th October 1990 </td> <td style="width: 50%; padding: 5px; vertical-align: top;"> Date of Mailing of this International Search Report 15. 11. 90 </td> </tr> <tr> <td style="width: 50%; padding: 5px; vertical-align: top;"> International Searching Authority EUROPEAN PATENT OFFICE </td> <td style="width: 50%; padding: 5px; vertical-align: top;"> Signature of Authorized Officer F.W. HECK </td> </tr> </table>			Date of the Actual Completion of the International Search 29th October 1990	Date of Mailing of this International Search Report 15. 11. 90	International Searching Authority EUROPEAN PATENT OFFICE	Signature of Authorized Officer F.W. HECK											
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III. DOCUMENTS CONSIDERED TO BE RELEVANT (CONTINUED FROM THE SECOND SHEET)		
Category *	Citation of Document, with indication, where appropriate, of the relevant passages	Relevant to Claim No
A	US, A, 2701378 (D.J. REINBOLT ET AL) 8 February 1955, see the whole document -----	1-16

ANNEX TO THE INTERNATIONAL SEARCH REPORT
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US-A- 3047896	07/08/62	NONE	
US-A- 3105257	01/10/63	NONE	
US-A- 2857608	28/10/58	NONE	
US-A- 2536942	02/01/51	NONE	
US-A- 2701378	08/02/55	NONE	

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